

Author Index

- Absi-Halabi, M., Stanislaus, A. and Trimm, D.L.
Coke formation on catalysts during the hydro-
processing of heavy oils - a review 193
- Aguinaga, A. and Montes, M.
New process for the regeneration of a nickel
hydrogenation catalyst poisoned by thiophene
L17
- Anderson, J.R., see Dong, Q.-N. 99
- Astier, M.P., Dji, G. and Teichner, S.J.
Nickel-molybdenum catalysts prepared by re-
duction of ammonium triammine tetranickel
pentamolybdate 321
- Bai, X., Zhang, Z. and Sachtler, W.M.H.
Direct and indirect promotion of Pd/Y by Ca^{2+}
ions 165
- Barcicki, J., see Machocki, A. 283
- Bayense, C.R., Pol, A.J.H.P. van der and Hooff,
J.H.C. van
Aromatization of propane over MFI-gallosili-
cates 81
- Bond, G.C., see Ismail, H.M. L1
- Borowiecki, T., see Machocki, A. 283
- Bourgeat-Lami, E., Massiani, P., Renzo, F. di, Es-
piau, P., Fajula, F. and Courieres, T. des
Study of the state of aluminium in zeolite beta
139
- Brito, J.L. and Laine, J.
Detection of $\beta\text{-NiMoO}_4$ in oxidic nickel-mo-
lybdenum catalysts L13
- Chang, C.-S., see Lee, M.-D. 267
- Chang, Y.-F., see Dong, Q.-N. 99
- Chao, K.J., see Wang, R. 39
- Chuah, G.K., Jaenicke, S. and Lee, J.Y.
Steady-state multiplicity in carbon monoxide
oxidation over LaMnO_3 51
- Chuang, K.T., see Wu, J.J. 71
- Courieres, T. des, see Gelin, P. 179
- Courieres, T. des, see Bourgeat-Lami, E. 139
- Cui, J., see Gao, Z. 331
- Dees, M.J., Hartog, J. den and Ponec, V.
Identification of active sites of reforming cata-
lysts by poisoning 343
- Denis, A., see Machocki, A. 283
- Dji, G., see Astier, M.P. 321
- Dong, Q.-N., Anderson, J.R., Mole, T., Chang,
Y.-F. and Western, R.J.
Reaction of benzene and toluene in the
presence of oxygen over H-ZSM5 zeolite: Aro-
matic oxygenates in the product 99
- Dong, T.-Y., see Lee, M.-D. 267
- Espiau, P., see Bourgeat-Lami, E. 139
- Fajula, F., see Bourgeat-Lami, E. 139
- Fierro, J.L.G., see Guerrero-Ruiz, A. 119
- Flego, C., see Gervasini, A. 153
- Fu, L., see Wu, J.J. 71
- Gao, Z., Zhang, B. and Cui, J.
Activity of highly dispersed $\alpha\text{-Fe}_2\text{O}_3$ on mole-
cular sieves for ethylbenzene dehydrogenation
331
- Gelin, P. and Courieres, T. des
Role of the amorphous matrix in the hydrother-
mal ageing of fluid catalytic cracking catalysts
179
- Gervasini, A. and Flego, C.
Hydrogen adsorption and desorption on alumi-
na supported platinum-multicomponent cata-
lysts with gas chromatographic pulse technique
153
- Gronsky, R., see Vinje, K. 361
- Guerrero-Ruiz, A., Rodriguez-Ramos, I. and Fier-
ro, J.L.G.
Dehydrogenation of methanol to methyl for-
mate over supported copper catalysts 119
- Hartog, J. den, see Dees, M.J. 343
- Hattori, A., see Satsuma, A. 295
- Hattori, T., see Satsuma, A. 295
- Ho, Y.S., see Wang, R. 39
- Hooff, J.H.C. van, see Bayense, C.R. 81
- Horio, M., Suzuki, K., Masuda, H. and Mori, T.
Alkylation of toluene with methanol on alumi-
na-pillared montmorillonite: Suppression of
deactivation by control of the lateral spacings
of pillars 109
- Hutchings, G.J.
Effect of promoters and reactant concentra-
tion on the selective oxidation of n-butane to
maleic anhydride using vanadium phosphorus
oxide catalysts - a review 1
- Ismagilov, Z.R., see Koryabkina, N.A. 63
- Ismail, H.M., Zaki, M.I., Bond, G.C. and Shurki,
R.
Temperature-programmed reduction of
 $\text{MoO}_x/\text{SiO}_x$ and $\text{MoO}_x/\text{Al}_2\text{O}_3$ catalysts: Sur-

- face structural consequences of impregnation acidity L1
- Jaenicke, S., see Chuah, G.K. 51
- Koryabkina, N.A., Ismagilov, Z.R., Shkrabina, R.A., Moroz, E.M. and Ushakov, V.A.
Influence of the method of alumina modification on formation of low-temperature solid solutions on magnesia-alumina systems 63
- Kotasthane, A.N., see Pradhan, A.R. 311
- Laine, J., see Brito, J.L. L13
- Lee, J.-F., see Lee, M.-D. 267
- Lee, J.Y., see Chuah, G.K. 51
- Lee, M.-D., Lee, J.-F., Chang, C.-S. and Dong, T.-Y.
Effects of addition of chromium, manganese or molybdenum to iron catalysts for carbon dioxide hydrogenation 267
- Lei, Y.-J. and Lei, Y.-J.
Platinum-tin complexing and its application to catalysis 33
- Leu, L.J., see Wang, R. 39
- Lin, C.F., see Wang, R. 39
- Machocki, A., Denis, A., Borowiecki, T. and Barcicki, J.
Promotion of methane conversion catalysts into higher hydrocarbons 283
- Massiani, P., see Bourgeat-Lami, E. 139
- Masuda, H., see Horio, M. 109
- Miyamoto, A., see Satsuma, A. 295
- Mole, T., see Dong, Q.-N. 99
- Montes, M., see Aguinaga, A. L17
- Mori, T., see Horio, M. 109
- Moroz, E.M., see Koryabkina, N.A. 63
- Murakami, Y., see Satsuma, A. 295
- Okada, F., see Satsuma, A. 295
- Pajonk, G.M.
Aerogel catalysts — a review 217
- Pol, A.J.H.P. van der, see Bayense, C.R. 81
- Ponec, V., see Dees, M.J. 343
- Pradhan, A.R., Kotasthane, A.N. and Rao, B.S.
Isopropylation of benzene over EU-1 zeolite catalyst 311
- Rao, B.S., see Pradhan, A.R. 311
- Renzo, F. di, see Bourgeat-Lami, E. 139
- Rodriguez-Ramos, I., see Guerrero-Ruiz, A. 119
- Sachtler, W.M.H., see Bai, X. 165
- Satsuma, A., Okada, F., Hattori, A., Miyamoto, A., Hattori, T. and Murakami, Y.
Promotion effects of various oxides on oxidation of benzene over vanadium pentoxide catalysts 295
- Shkrabina, R.A., see Koryabkina, N.A. 63
- Shurki, R., see Ismail, H.M. L1
- Stanislaus, A., see Absi-Halabi, M. 193
- Suzuki, K., see Horio, M. 109
- Szostak, R., see Vinje, K. 361
- Teichner, S.J., see Astier, M.P. 321
- Trimm, D.L., see Absi-Halabi, M. 193
- Ulan, J., see Vinje, K. 361
- Ushakov, V.A., see Koryabkina, N.A. 63
- Vinje, K., Ulan, J., Szostak, R. and Gronsky, R.
Stacking disorders in VPI-5 and AlPO₄-8 and the related loss of adsorption capacity 361
- Wang, R., Lin, C.F., Ho, Y.S., Leu, L.J. and Chao, K.J.
Silicon species in a SAPO-5 molecular sieve 39
- Western, R.J., see Dong, Q.-N. 99
- Wu, J.J., Fu, L. and Chuang, K.T.
Fluorinated styrene divinylbenzene copolymer as catalyst support 71
- Zaki, M.I., see Ismail, H.M. L1
- Zhang, B., see Gao, Z. 331
- Zhang, Z., see Bai, X. 165

Subject Index

Acid sites

- Identification of active sites of reforming catalysts by poisoning 343

Acidity

- Reaction of benzene and toluene in the presence of oxygen over H-ZSM5 zeolite: Aromatic oxygenates in the product 99

Acidity

- Temperature-programmed reduction of $\text{MoO}_x/\text{SiO}_x$ and $\text{MoO}_x/\text{Al}_2\text{O}_3$ catalysts: Surface structural consequences of impregnation acidity L1

Adsorption

- Stacking disorders in VPI-5 and AlPO_4 -8 and the related loss of adsorption capacity 361

Adsorption (hydrogen)

- Hydrogen adsorption and desorption on alumina supported platinum-multicomponent catalysts with gas chromatographic pulse technique 153

Aerogels

- Aerogel catalysts - a review 217

Ageing

- Reaction of benzene and toluene in the presence of oxygen over H-ZSM5 zeolite: Aromatic oxygenates in the product 99

Ageing

- Role of the amorphous matrix in the hydrothermal ageing of fluid catalytic cracking catalysts 179

Alkanes

- Platinum-tin complexing and its application to catalysis 33

AlPO_4 -8

- Stacking disorders in VPI-5 and AlPO_4 -8 and the related loss of adsorption capacity 361

Alumina

- Alkylation of toluene with methanol on alumina-pillared montmorillonite: Suppression of deactivation by control of the lateral spacings of pillars 109

Aluminium

- Study of the state of aluminium in zeolite beta 139

Aromatization

- Aromatization of propane over MFI-gallosilicates 81

Benzene

- Reaction of benzene and toluene in the presence of oxygen over H-ZSM5 zeolite: Aromatic oxygenates in the product 99

Benzene hydrogenation

- Nickel-molybdenum catalysts prepared by reduction of ammonium triammine tetranickel pentamolybdate 321

Benzene isopropylation

- Isopropylation of benzene over EU-1 zeolite catalyst 311

Benzene oxidation

- Promotion effects of various oxides on oxidation of benzene over vanadium pentoxide catalysts 295

Brønsted acidity

- Silicon species in a SAPO-5 molecular sieve 39

Butane oxidation

- Effect of promoters and reactant concentration on the selective oxidation of n-butane to maleic anhydride using vanadium phosphorus oxide catalysts - a review 1

Calcination

- Influence of the method of alumina modification on formation of low-temperature solid solutions on magnesia-alumina systems 63

Carbon dioxide

- Effects of addition of chromium, manganese or molybdenum to iron catalysts for carbon dioxide hydrogenation 267

Carbon monoxide oxidation

- Steady-state multiplicity in carbon monoxide oxidation over LaMnO_3 51

Catalyst characterization (IR, NMR)

- Study of the state of aluminium in zeolite beta 139

Catalyst characterization (IR, NMR, STEM, XRD)

- Role of the amorphous matrix in the hydrothermal ageing of fluid catalytic cracking catalysts 179

Catalyst characterization (Mössbauer spectroscopy)

- Effects of addition of chromium, manganese or molybdenum to iron catalysts for carbon dioxide hydrogenation 267

Catalyst characterization (TPR)

- Temperature-programmed reduction of $\text{MoO}_x/\text{SiO}_x$ and $\text{MoO}_x/\text{Al}_2\text{O}_3$ catalysts: Surface structural consequences of impregnation acidity L1
- Catalyst characterization (XRD)
- Detection of $\beta\text{-NiMoO}_4$ in oxidic nickel-molybdenum catalysts L13
- Catalyst preparation (sol-gel method)
- Aerogel catalysts — a review 217
- Catalyst preparation (wet impregnation)
- Platinum-tin complexing and its application to catalysis 33
- Chromium
- Effects of addition of chromium, manganese or molybdenum to iron catalysts for carbon dioxide hydrogenation 267
- Coke deposition
- Alkylation of toluene with methanol on alumina-pillared montmorillonite: Suppression of deactivation by control of the lateral spacings of pillars 109
- Coke formation
- Reaction of benzene and toluene in the presence of oxygen over H-ZSM5 zeolite: Aromatic oxygenates in the product 99
- Coke formation
- Effects of addition of chromium, manganese or molybdenum to iron catalysts for carbon dioxide hydrogenation 267
- Coke formation
- Coke formation on catalysts during the hydroprocessing of heavy oils — a review 193
- Copper
- Dehydrogenation of methanol to methyl formate over supported copper catalysts 119
- Cracking catalysts
- Role of the amorphous matrix in the hydrothermal ageing of fluid catalytic cracking catalysts 179
- Crystal disorders
- Stacking disorders in VPI-5 and $\text{AlPO}_4\text{-8}$ and the related loss of adsorption capacity 361
- Deactivation
- Coke formation on catalysts during the hydroprocessing of heavy oils — a review 193
- Deammoniation
- Study of the state of aluminium in zeolite beta 139
- Dehydrogenation
- Platinum-tin complexing and its application to catalysis 33
- Dehydrogenation
- Dehydrogenation of methanol to methyl formate over supported copper catalysts 119
- Desorption (hydrogen)
- Hydrogen adsorption and desorption on alumina supported platinum-multicomponent catalysts with gas chromatographic pulse technique 153
- Dispersion
- Hydrogen adsorption and desorption on alumina supported platinum-multicomponent catalysts with gas chromatographic pulse technique 153
- Dispersion
- Activity of highly dispersed $\alpha\text{-Fe}_2\text{O}_3$ on molecular sieves for ethylbenzene dehydrogenation 331
- Electron probe microanalysis
- Silicon species in a SAPO-5 molecular sieve 39
- Ethylbenzene dehydrogenation
- Activity of highly dispersed $\alpha\text{-Fe}_2\text{O}_3$ on molecular sieves for ethylbenzene dehydrogenation 331
- EU-1
- Isopropylation of benzene over EU-1 zeolite catalyst 311
- EuroPt-1
- Identification of active sites of reforming catalysts by poisoning 343
- Fluorinated polymer
- Fluorinated styrene divinylbenzene copolymer as catalyst support 71
- Fluorination
- Fluorinated styrene divinylbenzene copolymer as catalyst support 71
- Gallosilicates
- Aromatization of propane over MFI-gallosilicates 81
- H-(Ga)ZSM-5
- Aromatization of propane over MFI-gallosilicates 81
- Heat treatment
- Influence of the method of alumina modification on formation of low-temperature solid solutions on magnesia-alumina systems 63
- Heavy oils

- Coke formation on catalysts during the hydro-processing of heavy oils — a review 193
- n-Hexane conversion
- Identification of active sites of reforming catalysts by poisoning 343
- Hydrogen-oxygen reaction
- Fluorinated styrene divinylbenzene copolymer as catalyst support 71
- Hydrogenation
- Effects of addition of chromium, manganese or molybdenum to iron catalysts for carbon dioxide hydrogenation 267
- Hydrogenation
- New process for the regeneration of a nickel hydrogenation catalyst poisoned by thiophene L17
- Hydrogenolysis
- Direct and indirect promotion of Pd/Y by Ca^{2+} ions 165
- Hydroprocessing
- Coke formation on catalysts during the hydro-processing of heavy oils — a review 193
- Intermetallic catalyst
- Nickel-molybdenum catalysts prepared by reduction of ammonium triamine tetranickel pentamolybdate 321
- Ion exchange
- Study of the state of aluminium in zeolite beta 139
- Iron
- Effects of addition of chromium, manganese or molybdenum to iron catalysts for carbon dioxide hydrogenation 267
- Iron oxide
- Activity of highly dispersed $\alpha\text{-Fe}_2\text{O}_3$ on molecular sieves for ethylbenzene dehydrogenation 331
- Isomerization
- Direct and indirect promotion of Pd/Y by Ca^{2+} ions 165
- Isomorphous substitution
- Aromatization of propane over MFI-gallosilicates 81
- Kinetics
- Steady-state multiplicity in carbon monoxide oxidation over LaMnO_3 51
- Lanthanum manganese oxide
- Steady-state multiplicity in carbon monoxide oxidation over LaMnO_3 51
- Lead
- Promotion of methane conversion catalysts into higher hydrocarbons 283
- Magic angle spinning-nuclear magnetic resonance
- Silicon species in a SAPO-5 molecular sieve 39
- Magnesia-alumina
- Influence of the method of alumina modification on formation of low-temperature solid solutions on magnesia-alumina systems 63
- Maleic anhydride
- Effect of promoters and reactant concentration on the selective oxidation of n-butane to maleic anhydride using vanadium phosphorus oxide catalysts — a review 1
- Manganese
- Effects of addition of chromium, manganese or molybdenum to iron catalysts for carbon dioxide hydrogenation 267
- Manganese
- Promotion of methane conversion catalysts into higher hydrocarbons 283
- Matrix effects
- Role of the amorphous matrix in the hydrothermal ageing of fluid catalytic cracking catalysts 179
- Metal sites
- Identification of active sites of reforming catalysts by poisoning 343
- Metal-proton adducts
- Direct and indirect promotion of Pd/Y by Ca^{2+} ions 165
- Methane conversion
- Promotion of methane conversion catalysts into higher hydrocarbons 283
- Methane oxidative coupling
- Promotion of methane conversion catalysts into higher hydrocarbons 283
- Methanol
- Dehydrogenation of methanol to methyl formate over supported copper catalysts 119
- Methyl formate
- Dehydrogenation of methanol to methyl formate over supported copper catalysts 119
- Molecular sieves
- Activity of highly dispersed $\alpha\text{-Fe}_2\text{O}_3$ on molecular sieves for ethylbenzene dehydrogenation 331
- Molybdenum

- Effects of addition of chromium, manganese or molybdenum to iron catalysts for carbon dioxide hydrogenation 267
- Molybdenum**
Promotion effects of various oxides on oxidation of benzene over vanadium pentoxide catalysts 295
- Molybdenum oxide/alumina**
Temperature-programmed reduction of $\text{MoO}_x/\text{SiO}_x$ and $\text{MoO}_x/\text{Al}_2\text{O}_3$ catalysts: Surface structural consequences of impregnation acidity L1
- Molybdenum oxide/silica**
Temperature-programmed reduction of $\text{MoO}_x/\text{SiO}_x$ and $\text{MoO}_x/\text{Al}_2\text{O}_3$ catalysts: Surface structural consequences of impregnation acidity L1
- Montmorillonite**
Alkylation of toluene with methanol on alumina-pillared montmorillonite: Suppression of deactivation by control of the lateral spacings of pillars 109
- Nickel**
New process for the regeneration of a nickel hydrogenation catalyst poisoned by thiophene L17
- Nickel molybdate**
Detection of $\beta\text{-NiMoO}_4$ in oxidic nickel-molybdenum catalysts L13
- Nickel-molybdenum**
Nickel-molybdenum catalysts prepared by reduction of ammonium triamine tetranickel pentamolybdate 321
- Oxygenates**
Reaction of benzene and toluene in the presence of oxygen over H-ZSM5 zeolite: Aromatic oxygenates in the product 99
- Palladium**
Direct and indirect promotion of Pd/Y by Ca^{2+} ions 165
- Perovskites**
Steady-state multiplicity in carbon monoxide oxidation over LaMnO_3 51
- Phosphorus**
Promotion effects of various oxides on oxidation of benzene over vanadium pentoxide catalysts 295
- Pillar spacing**
Alkylation of toluene with methanol on alumina-pillared montmorillonite: Suppression of deactivation by control of the lateral spacings of pillars 109
- Pillared montmorillonite**
Alkylation of toluene with methanol on alumina-pillared montmorillonite: Suppression of deactivation by control of the lateral spacings of pillars 109
- Platinum**
Fluorinated styrene divinylbenzene copolymer as catalyst support 71
- Platinum**
Hydrogen adsorption and desorption on alumina supported platinum-multicomponent catalysts with gas chromatographic pulse technique 153
- Platinum/tin**
Platinum-tin complexing and its application to catalysis 33
- Poisoning**
Identification of active sites of reforming catalysts by poisoning 343
- Polymer support**
Fluorinated styrene divinylbenzene copolymer as catalyst support 71
- Pore structure**
Aerogel catalysts — a review 217
- Promoters**
Effect of promoters and reactant concentration on the selective oxidation of n-butane to maleic anhydride using vanadium phosphorus oxide catalysts — a review 1
- Promotion**
Promotion of methane conversion catalysts into higher hydrocarbons 283
- Promoters**
Promotion effects of various oxides on oxidation of benzene over vanadium pentoxide catalysts 295
- Pulse-flow method**
Hydrogen adsorption and desorption on alumina supported platinum-multicomponent catalysts with gas chromatographic pulse technique 153
- Pyridine**
Identification of active sites of reforming catalysts by poisoning 343
- Reforming catalysts**
Identification of active sites of reforming catalysts by poisoning 343
- Regeneration**

- New process for the regeneration of a nickel hydrogenation catalyst poisoned by thiophene L17
- Residue
Reaction of benzene and toluene in the presence of oxygen over H-ZSM5 zeolite: Aromatic oxygenates in the product 99
- Ring opening
Direct and indirect promotion of Pd/Y by Ca^{2+} ions 165
- SAPO-5
Silicon species in a SAPO-5 molecular sieve 39
- Selectivity (benzene)
Nickel-molybdenum catalysts prepared by reduction of ammonium triamine tetranickel pentamolybdate 321
- Selectivity (C_2+ hydrocarbons, ethane, ethene)
Promotion of methane conversion catalysts into higher hydrocarbons 283
- Selectivity (C_2 - C_4 hydrocarbons)
Effects of addition of chromium, manganese or molybdenum to iron catalysts for carbon dioxide hydrogenation 267
- Selectivity (several reactions)
Aerogel catalysts — a review 217
- Selectivity shifts
Identification of active sites of reforming catalysts by poisoning 343
- Sensor
Platinum-tin complexing and its application to catalysis 33
- Silicon
Silicon species in a SAPO-5 molecular sieve 39
- Solid solutions
Influence of the method of alumina modification on formation of low-temperature solid solutions on magnesia-alumina systems 63
- Stability
Aerogel catalysts — a review 217
- Stacking disorders
Stacking disorders in VPI-5 and AlPO_4 -8 and the related loss of adsorption capacity 361
- Steady state (multiple)
Steady-state multiplicity in carbon monoxide oxidation over LaMnO_3 51
- Steam treatment
Role of the amorphous matrix in the hydrothermal ageing of fluid catalytic cracking catalysts 179
- Styrene divinylbenzene copolymer
Fluorinated styrene divinylbenzene copolymer as catalyst support 71
- Sulphur
Identification of active sites of reforming catalysts by poisoning 343
- Sulphur poisoning
Nickel-molybdenum catalysts prepared by reduction of ammonium triamine tetranickel pentamolybdate 321
- Surface structure
Temperature-programmed reduction of $\text{MoO}_x/\text{SiO}_x$ and $\text{MoO}_x/\text{Al}_2\text{O}_3$ catalysts: Surface structural consequences of impregnation acidity L1
- Thiophene poisoning
New process for the regeneration of a nickel hydrogenation catalyst poisoned by thiophene L17
- Tin
Promotion effects of various oxides on oxidation of benzene over vanadium pentoxide catalysts 295
- Toluene
Reaction of benzene and toluene in the presence of oxygen over H-ZSM5 zeolite: Aromatic oxygenates in the product 99
- Toluene alkylation
Alkylation of toluene with methanol on alumina-pillared montmorillonite: Suppression of deactivation by control of the lateral spacings of pillars 109
- Toluene hydrodealkylation
Nickel-molybdenum catalysts prepared by reduction of ammonium triamine tetranickel pentamolybdate 321
- Tungsten
Promotion effects of various oxides on oxidation of benzene over vanadium pentoxide catalysts 295
- Vanadium pentoxide
Promotion effects of various oxides on oxidation of benzene over vanadium pentoxide catalysts 295
- Vanadium-phosphorus oxide
Effect of promoters and reactant concentration on the selective oxidation of n-butane to maleic anhydride using vanadium phosphorus oxide catalysts — a review 1

